

Sub 95 1 47. (Amended) A data analysis system, comprising:

2 a memory for storing discrete cosine transform equations having been formed by
3 arranging the discrete cosine transform equations into at least one collection having at
4 least two discrete cosine transform constants, scaling the discrete cosine transform
5 equations in the at least one collection by dividing each of the discrete cosine transform
6 constants in the collection by one of the discrete cosine transform constants from the at
7 least one collection and representing each of the scaled discrete cosine transform
8 constants with estimated scaled discrete cosine transform constants approximated by
9 sums of powers-of-2; and

10 a transformer for applying the transform equations to perform a discrete cosine
11 transform to decorrelate data into discrete cosine transform coefficients.